

**IN THE CLAIMS:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claim 1 (currently amended): A method of screening for possible solid forms of [a sample] <sup>a polymorph</sup> an organic compound, said method comprising the steps of: disposing a non-solid [the] sample <sup>a polymorph</sup> of the organic compound in one or more receptacles, where at least one of the receptacles defines a capillary space, and the sample is disposed within the capillary space;

<sup>solid form;</sup> solidifying the sample in or on said receptacles to generate at least one <sup>polymorph</sup> for its crystal forms

<sup>analytical methods selected from the group</sup> analyzing said at least one solid form <sup>in a manner wherein the</sup> analytical result is by any suitable analysis generating analytical results <sup>consisting of visual analysis, microscopic analysis, thermal analysis,</sup> indicative of [the generated] solid form; and <sup>diffracto, crystalline, and spectroscopic analysis</sup> classifying said at least one solid form according to the analytical results. Crystalline

Claim 2 (original): The method of claim 1 wherein the sample consists essentially of a solution of one compound.

Claim 3 (original): The method of claim 1 wherein the sample comprises a mixture of compounds.

Claim 4 (original): The method of claim 1 wherein the sample is disposed on a plurality of receptacles, including at least two different types of receptacles.

Claim 5 (original): The method of claim 4 wherein said at least one receptacle includes a receptacle that do not define a capillary space.

Claim 6 (original): The method of claim 1 wherein the sample is placed in at least five receptacles defining capillary spaces.

Claim 7 (original): The method of claim 1 wherein the compound is placed in at least 100 receptacles defining capillary spaces.

Claim 8 (original): The method of claim 1 wherein the solidifying step comprises crystallizing the sample.

Claim 9 (original): The method of claim 1 wherein the solidifying step is selected from the group consisting of solvent evaporation, cooling, heating, anti-solvent addition, gel diffusion, and thin-layer deposition.

Claim 10 (original): The method of claim 1, further comprising the step of forming a supersaturated solution of the sample.

Claim 11 (currently amended): The method of claim 1 wherein the disposing [placing] step comprises placing the sample into at least one capillary tube.

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Claim 12 (previously amended): The method of claim 1 wherein the disposing step comprises placing the sample into a receptacle selected from the group consisting of a well plate, a block with holes or pores and a sheet with holes or pores.

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Claim 13 (original): The method of claim 1, wherein the analyzing step comprises a method selected from the group consisting of visual analysis, microscopic analysis, thermal analysis, diffraction analysis, and spectroscopic analysis.

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Claim 14 (original): The method of claim 13, wherein the diffraction analysis is x-ray diffraction analysis.

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Claim 15 (original): The method of claim 13, wherein the analyzing step comprises analyzing said form by X-ray diffraction analysis using synchrotron radiation as the radiation source for said analysis.

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Claim 16 (original): The method of claim 13, wherein the step of analyzing said form comprises Raman spectroscopic analysis.

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Claim 17 (original): The method of claim 1, wherein the step of analyzing said form comprises analyzing said form without removing it from said receptacle.

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Claim 18 (original): The method of claim 11, wherein the step of analyzing said form comprises analyzing said form without removing it from said capillary tubes.

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Claim 19 (original): The method of claim 18 wherein the analyzing step comprises analyzing said form by X-ray diffraction analysis using synchrotron radiation as the radiation source for said analysis.

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Claim 20 (original): The method of claim 1, further comprising the step of comparing the generated form to a known form.

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Claim 21 (currently amended): The method of claim 1 wherein said [generating] solidifying step produces at least one form of the sample that is different than a known form of the sample.

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Claim 22 (original): The method of claim 1 wherein said receptacle is subjected to substantially constant motion during said generating step.

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Claim 23 (original): The method of claim 1 wherein said receptacle is rotated along its longitudinal axis during said generating step.

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Claim 24 (original): The method of claim 1 wherein said receptacle is subject to centrifuging during said generating step.

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Claim 25 (original): The method of claim 24 wherein said centrifuging is sufficient to concentrate the solid or semisolid at one end of a capillary space.

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Claim 26 (previously amended): The method of claim 24 wherein said centrifuging is sufficient to concentrate the generated form in one end of the capillary space.

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Claim 27 (previously amended): The method of claim 24 wherein two or more samples are centrifuged at different speeds or for different lengths of time.

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Claim 28 (original): The method of claim 24 wherein said centrifuging is sufficient to move the sample to the bottom of said receptacle when one end of said receptacle is closed.

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Claim 29 (original): The method of claim 1 wherein said receptacle is subject to centrifugal evaporation during said generating step.

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Claim 30 (original): The method of claim 29 wherein said centrifugal evaporation is sufficient to concentrate the solid or semisolid at one end of a capillary space.

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Claim 31 (original): The method of claim 29 wherein said centrifugal evaporation is sufficient to facilitate in-situ analysis.

*36*  
Claim 32 (original): The method of claim 29 wherein said centrifugal evaporation is sufficient to provide environmental variation.

*37*  
Claim 33 (original): The method of claim 29 wherein said centrifugal evaporation is sufficient to move the sample to the bottom of said receptacle when one end of said receptacle is closed.

Claim 34: Previously cancelled.

*38*  
Claim 35 (previously amended): The method of claim 1, further comprising the step of determining whether more than one solid form was generated from said sample.

*39*  
Claim 36 (amended): The method of claim 34 wherein said sample comprises a compound or mixture that has biological activity in at least one form of said compound or mixture.  
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Claim 37: Previously cancelled.

*40*  
Claim 38 (previously amended): The method of claim 1 wherein the sample comprises a known polymorphic material.

*41*  
Claim 39 (previously amended): The method of claim 1 wherein the sample comprises at least one material that is not recognized as being polymorphic.

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Claim 40 (previously amended): The method of claim 1 wherein a plurality of samples are screened.

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Claim 41 (previously amended): The method of claim 1 wherein a second analyzing step is performed on said generated form, said second analyzing step providing data indicative of bioavailability:

Claim 42: Previously cancelled.

Claim 43: Previously cancelled.

Claim 44: Previously cancelled.

Claim 45: Previously cancelled.

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Claim 46 (previously amended): The method of claim 11, wherein the analyzing step comprises analyzing said at least one solid form by X-ray diffraction analysis using synchrotron radiation as the radiation source for said analysis:

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Claim 47 (previously amended): The method of claim 11, wherein the step of analyzing said at least one solid form comprises Raman spectroscopic analysis.

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Claim 48 (previously amended): The method of claim 11, wherein the step of analyzing said at least one solid form comprises analyzing said form without removing it from said capillary tube.

Claim 49: Previously cancelled.

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Claim 50 (previously amended): The method of claim 1, wherein said classifying step comprises classifying each said generated solid form according to its x-ray diffraction pattern.

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Claim 51 (previously amended): The method of claim 1, further comprising subjecting a plurality of samples to the screening method, wherein at least two different samples are subjected to different conditions during the solidifying step.

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Claim 52 (previously amended): The method of claim 1, comprising the step of dividing the sample into a plurality of sample portions, and subjecting said plurality of sample portions to the screening method, wherein at least two different portions are subjected to different conditions during the solidifying step.

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Claim 53 (currently amended): A method of screening [a sample] an organic compound, said screening method comprising the steps of:

disposing a non-solid [the] sample of the organic compound in [on] a plurality of capillary tubes [to generate solids];

centrifuging the plurality of capillary tubes;

solidifying the sample in the capillary tubes;

analyzing the solids [in a manner wherein the analytical result is] by any suitable analysis generating analytical results indicative of [the generated] solid form [of the solids]; and

classifying [each of the solids according to the solid form of the solids] the solids by solid form according to the analytical results.

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Claim 54 (previously amended): The method of claim 53, wherein at least part of said centrifuging step occurs during said solidifying step.

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Claim 55 (original): The method of claim 53, wherein said centrifuging step is performed at a pressure lower than ambient pressure.

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Claim 56 (original): The method of claim 53, wherein said centrifuging step is performed under vacuum.

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Claim 57 (currently amended): A method of screening [a sample] an organic compound according to its solid form, said screening method comprising the steps of:

disposing [the] a non-solid sample of the organic compound on a plurality of receptacles, where at least one of the receptacles defines a capillary space, and the sample is disposed in the capillary space;

generating at least one semisolid from the sample in or on said receptacles;

analyzing the generated semisolid [wherein the analytical result is] by any suitable analysis providing analytical results indicative of the form of the semisolid; and

classifying the generated semisolid [according to the indicated] by form according to the analytical results.

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Claim 58 (currently amended): A method of screening [a sample] an organic compound, said screening method comprising the steps of:

disposing [the] a non-solid sample of the organic compound on a well plate, wherein said well plate defines a plurality of capillary spaces, and the sample is disposed in the capillary spaces;

solidifying the samples in said capillary spaces to generate solids;

analyzing the generated solids [wherein the analytical result is] by any suitable analysis generating analytical results indicative of the solid form of the generated solids; and

classifying the generated solids [according to the indicated] by solid form according to the analytical results.

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Claim 59 (previously added): The method of claim 58, wherein the step of analyzing the generated solids comprises analyzing without removing the generated solids from the receptacle in which the solids were generated.

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Claim 60 (previously added): The method of claim 59, wherein the analyzing step comprises x-ray diffraction analysis:

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Claim 61 (previously added): The method of claim 60, wherein the analyzing step comprises analyzing said generated solids by X-ray diffraction analysis using synchrotron radiation as the radiation source for said analysis.

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Claim 62 (previously added): The method of claim 58, wherein at least some of said capillary spaces are from about 0.1 mm to about 30 mm.

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Claim 63 (previously added): The method of claim 58 wherein at least some of said capillary spaces are from about 0.5 mm to about 17 mm.

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Claim 64 (previously added): The method of claim 58 wherein at least some of said capillary spaces are from about 0.5 mm to about 7 mm.

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Claim 65 (previously added): The method of claim 58, wherein at least some of said capillary spaces are from about 0.5 mm to about 5 mm.

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Claim 66 (previously added): The method of claim 58, wherein at least some of said capillary spaces are from about 0.5 mm to about 2.5 mm.

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Claim 67 (currently amended): A method of generating and detecting possible solid forms of an organic compound, said method comprising the steps of:

generating a melt from a sample comprising the organic compound [, element, or mixture;] [disposing the melt on] in one or more receptacles defining a capillary space, and the melt is disposed in the capillary space;

solidifying the melt to generate at least one solid in or on said receptacles;

analyzing said at least one generated solid [in a manner wherein the analytical result is] by any suitable analysis generating analytical results indicative of [the] solid form [of the generated solid].

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Claim 68 (currently amended): The method of claim [64] 67, wherein the compound, element or mixture thereof is free of a solvent.

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Claim 69 (currently amended): A method of generating and detecting possible solid forms of an organic compound, said method comprising the steps of:

melting a sample comprising the organic compound to form a melt [;]  
[disposing the melt on] in one or more receptacles defining a capillary space, wherein the melt is disposed in the capillary space;

forming a crystalline material from the melt in or on said receptacles;

analyzing said crystalline material [in a manner wherein the analytical result is] by any suitable analysis generating analytical results indicative of [the] solid form [of the crystalline material].

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Claim 70 (currently amended): The method of claim [64] 69, wherein the melt is free of a solvent.

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Claim 71 (previously added): The method of claim 60 wherein the analyzing step comprises transmission x-ray diffraction analysis.

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Claim 72 (previously added): The method of claim 14 wherein the analyzing step comprises transmission x-ray diffraction analysis.

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Claim 73 (previously added): The method of claim 1 wherein said at least one receptacle that defines said capillary space is made of polymer or glass.

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Claim 74 (previously added): The method of claim 54 wherein said at least one receptacle that defines said capillary space is made of polymer or glass.

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Claim 75 (currently amended): The method of claim [64] 67 wherein said one or more receptacles defining said capillary space is made of polymer or glass.

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Claim 76 (currently amended): The method of claim [66] 69 wherein said one or more receptacles defining said capillary space is made of polymer or glass.

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Claim 77 (previously added): The method of claim 1 wherein said one or more receptacles comprises a well plate.

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Claim 78 (previously added): The method of claim 57 wherein said plurality of receptacles comprises a well plate.

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Claim 79 (currently amended): The method of claim [64] 67 wherein said one or more receptacles comprises a well plate.

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Claim 80 (currently amended): The method of claim [66] 69 wherein said one or more receptacles comprises a well plate.